

We Claim:

1. A library of polynucleotides, the library comprising the sequence information of at least one of SEQ ID NOS:1-3544, 3546-4510, 4512-4725, 4727-4748, and 4750-5252.
- 5 2. The library of claim 1, wherein the library is provided on a nucleic acid array.
3. The library of claim 1, wherein the library is provided in a computer-readable format.
- 10 4. The library of claim 1, wherein the library comprises a differentially expressed polynucleotide comprising a sequence selected from the group consisting of SEQ ID NOS:65, 174, 203, 252, 253, 387, 419, 420, 491, 552, 560, 581, 590, 648, 693, 726, 746, 990, 1095, 1124, 1205, 1354, 1387, 1780, 1899, 1915, 1979, 2007, 2024, 2245, and 2325.
- 15 5. The library of claim 1, wherein the library comprises a polynucleotide differentially expressed in a human breast cancer cell, where the polynucleotide comprises a sequence selected from the group consisting of SEQ ID NOS:15, 36, 44, 45, 89, 146, 154, 159, 165, 174, 172, 183, 203, 261, 364, 366, 387, 419, 420, 496, 503, 510, 512, 529, 552, 560, 564, 570, 590, 606, 644, 646, 693, 707, 711, 726, 746, 754, 756, 875, 902, 921, 942, 20 990, 1095, 1104, 1122, 1131, 1142, 1170, 1184, 1205, 1286, 1289, 1354, 1387, 1435, 1535, 1751, 1764, 1777, 1795, 1860, 1869, 1882, 1890, 1915, 1933, 1934, 1979, 1980, 2007, 2023, 2040, 2059, 2223, 2245, 2300, 2325, 2409, 2462, 2486, 2488, and 2492.
- 25 6. The library of claim 1, wherein the library comprises a polynucleotide differentially expressed in a human colon cancer cell, where the polynucleotide comprises a sequence selected from the group consisting of SEQ ID NOS:33, 65, 228, 250, 252, 253, 280, 282, 355, 370, 387, 443, 460, 491, 545, 560, 581, 603, 680, 693, 703, 704, 716, 726, 746, 752, 753, 1095, 1104, 1205, 1241, 1264, 1354, 1387, 1401, 1442, 1514, 1734, 1742, 1780, 1851, 1899, 1915, 1954, 2024, 2066, 2262, and 2325.

09267648-031000

0001619 84926260

7. The library of claim 1, wherein the library comprises a polynucleotide differentially expressed in a human lung cancer cell, where the polynucleotide comprises a sequence selected from the group consisting of SEQ ID NOS: 10, 54, 65, 171, 174, 203, 252, 253, 254, 285, 419, 420, 466, , 491, 525, 526, 552, 571, 574, 590, 693, 700, 726, 742, 5 746, 861, 990, 922, 1088, 1288, 1355, 1417, 1422, 1444, 1454, 1570, 1597, 1979, 2007, 2024, 2034, 2038, 2126, and 2245.

8. The library of claim 1, wherein the library comprises a polynucleotide differentially expressed in a human cancer cell, where the polynucleotide comprises a 10 sequence selected from the group consisting of SEQ ID NOS:648 and1899.

9. An isolated polynucleotide comprising a nucleotide sequence having at least 90% sequence identity to an identifying sequence of SEQ ID NOS:1-3544, 3546-4510, 4512-4725, 4727-4748, and 4750-5252, or a degenerate variant or fragment thereof. 15

10. The polynucleotide of claim 9, wherein the polynucleotide comprises a sequence of one of SEQ ID NOS:2503, 2504, 2550, 2555, 2578, 2656, 2667, 2712, 2723, 2728, 2738, 2734, 2754, 2758, 2760, 2832, 2835, 2842, 2843, 2849, 2893, 2933, 2956, 2971, 2981, 3009, 3018, 3019, 3046, 3084, 3190, 3129, 3173, 3226, 3227, 3274, 3290, 20 3356, 3365, 3377, 3381, 3390, 3391, 3404, 3407, 3408, 3409, 3418, 3419, 3451, 3597, 3600, 3618, 3632, 3635, 3646, 3648, 3657, 3665, 3669, 3670, 3671, 3656, 3680, 3686, 3695, 3696, 3700, 3710, 3736, 3762, 3763, 3774, 3775, 3791, 3804, 3806, 3836, 3895, 3905, 3919, 3920, 3927, 3936, 3951, 3974, 3998, 4036, 4038, 4044, 4056, 4072, 4117, 4119, 4152, 4153, 4154, 4172, 4175, 4159, 4175, 4205, 4216, 4223, 4228, 4238, 4241, 25 4243, 4251, 4253, 4261, 4263, 4278, 4288, 4322, 4330, 4343, 4359, 4363, 4364, 4365, 4373, 4375, 4384, 4385, 4406, 4409, 4431, 4434, 4441, 4442, 4444, 4455, 4469, 4473, 4477, 4482, 4489, 4495, 4496, 4498, 4525, 4535, 4536, 4540, 4560, 4616, 4562, 4586, 4605, 4629, 4653, 4654, 4658, 4659, 4660, 4661, 4664, 4665, 4668, 4684, 4682, 4688, 4689, 4710, 4718, 4733, 4724, 4733, 4746, 4755, 4760, 4710, 4777, 4785, 4792, 4794, 30 4801, 4807, 4821, 4822, 4847, 4850, 4854, 4856, 4866, 4885, 4900, 4901, 4905, 4914, 4925, 4929, 4931, 4943, 4944, 4959, 5111, 5020, 5041, 5046, 5059, 5083, 5090, 5094, 5102, 5125, 5174, 5197, 5208, 5217, 5237, 5239, 5241, 5243, 5248, and 5252.

0007E0" 84946260

11. A recombinant host cell containing the polynucleotide of claim 9.
12. An isolated polypeptide encoded by the polynucleotide of claim 9.
- 5 13. An antibody that specifically binds a polypeptide of claim 12.
14. A vector comprising the polynucleotide of claim 9.
15. A polynucleotide comprising the nucleotide sequence of an insert contained in
10 a clone deposited as ATCC accession number xx, xx, xx, xx, xx, xx, xx, or xx.
16. A method of detecting differentially expressed genes correlated with a
cancerous state of a mammalian cell, the method comprising the step of:
detecting at least one differentially expressed gene product in a test sample derived
15 from a cell suspected of being cancerous, where the gene product is encoded by a gene
corresponding to a sequence of at least one of SEQ ID NOS:10, 15, 33, 36, 44, 45, 54, 65,
89, 146, 154, 159, 165, 171, 172, 174, 183, 203, 228, 250, 252, 253, 254, 261, 280, 282,
285, 355, 364, 366, 370, 387, 419, 420, 443, 460, 466, 491, 496, 503, 510, 512, 525, 526,
529, 545, 552, 560, 564, 570, 571, 574, 581, 590, 603, 606, 644, 646, 648, 680, 693, 700,
20 703, 704, 707, 711, 716, 726, 742, 746, 752, 753, 754, 756, 861, 875, 902, 921, 922, 942,
990, 1088, 1095, 1104, 1122, 1131, 1142, 1170, 1184, 1205, 1286, 1288, 1289, 1354,
1355, 1387, 1417, 1435, 1444, 1454, 1535, 1570, 1597, 1734, 1742, 1751, 1764, 1777,
1780, 1795, 1860, 1869, 1882, 1890, 1899, 1915, 1933, 1934, 1954, 1979, 1980, 2007,
2023, 2024, 2034, 2040, 2059, 2126, 2223, 2245, 2262, 2300, 2325, 2409, 2486, 2462,
25 2488, 2492, 1241, 1264, 1401, 1422, 1442, 1514, 1851, 1915, 2007, 2024, 2038, 2066, and
2245;
wherein detection of the differentially expressed gene product is correlated with a
cancerous state of the cell from which the test sample was derived.
- 30 17. The method of claim 16, wherein said detecting step is by hybridization of the
test sample to a reference array, wherein the reference array comprises an identifying
sequence of at least one of SEQ ID NOS: 65, 174, 203, 252, 253, 387, 419, 420, 491, 552,

560, 581, 590, 648, 693, 726, 746, 990, 1095, 1124, 1205, 1354, 1387, 1780, 1899, 1915, 1979, 2007, 2024, 2325, and 2245.

18. The method of claim 16, wherein the cell is a breast tissue derived cell, and the
5 differentially expressed gene product is encoded by a gene corresponding to a sequence of
at least one of SEQ ID NOS:36, 44, 45, 89, 146, 154, 159, 165, 172, 174, 183, 203, 261,
364, 366, 387, 419, 420, 496, 503, 510, 512, 529, 552, 560, 564, 570, 590, 606, 644, 646,
693, 707, 711, 726, 746, 754, 756, 875, 902, 921, 942, 990, 1095, 1104, 1122, 1131, 1142,
1170, 1184, 1205, 1286, 1289, 1354, 1387, 1435, 1535, 1751, 1764, 1777, 1795, 1860,
10 1869, 1882, 1890, 1915, 1933, 1934, 1979, 1980, 2007, 2023, 2040, 2059, 2223, 2245,
2300, 2325, 2409, 2462, 2486, 2488, and 2492.

19. The method of claim 16, wherein the cell is a colon tissue derived cell, and the
differentially expressed gene product is encoded by a gene corresponding to a sequence of
15 at least one of SEQ ID NOS:33, 65, 228, 250, 252, 253, 280, 282, 355, 370, 387, 443, 460,
491, 545, 560, 581, 603, 680, 693, 703, 704, 716, 726, 746, 752, 753, 1095, 1104, 1205,
1241, 1264, 1354, 1387, 1401, 1442, 1514, 1734, 1742, 1780, 1851, 1899, 1915, 1954,
2024, 2066, 2262, and 2325.

20. The method of claim 16, wherein the cell is a lung tissue derived cell, and the
differentially expressed gene product is encoded by a gene corresponding to a sequence of
at least one of SEQ ID NOS: 10, 54, 65, 171, 174, 203, 252, 253, 254, 285, 419, 420, 466,
491, 525, 526, 552, 571, 574, 590, 693, 700, 726, 742, 746, 861, 922, 990, 1088, 1288,
1355, 1417, 1422, 1444, 1454, 1570, 1597, 1979, 2007, 2024, 2034, 2038, 2126, and 2245.

21. The method of claim 16, wherein the differentially expressed gene product is
encoded by a gene corresponding to a sequence of at least one of SEQ ID NOS:648 and
1899.

"NOTED" 84926260

Adler
A1